

ABSTRACT OF THE DISCLOSURE

- Provided is an electro-optic modulator comprising an organic free radical
- 5 compound, preferably comprising a reflective organic free radical compound, as an active modulating material. The modulator is reversibly switched between two states of high and low transmission at a wavelength by the application of an electric current.
- Preferably, the optical modulator is solid state with no moving parts such that the active modulating material does not move when reversibly switched between the two states.
- 10 Also provided are methods of modulating an optical signal utilizing such electro-optic modulators.